S.S. RHINE MARU.
Kobe Rpt No 3920.
Construction Profile & Decks

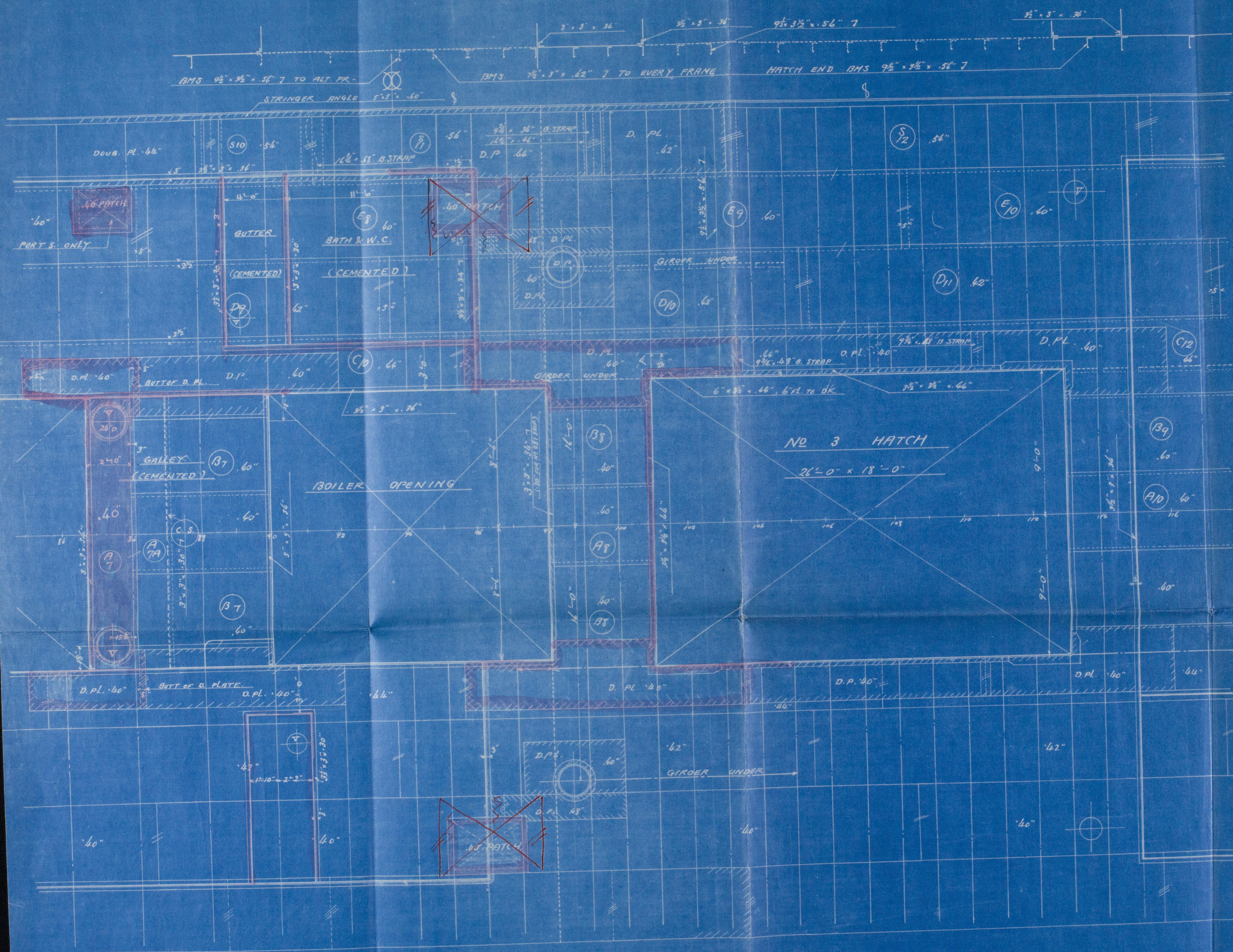
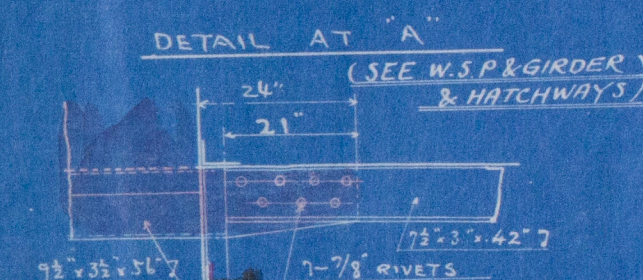
APPROVED PLAN "D"

Kawasaki Nos 481 + 483

Alterations to Awning Deck Amidships

S/S RHINE MARU, No 481.

Kobe Rpt. No 3920.

Nº 481 & 3
ALTERATION OF
AWNING DECK
AMIDSHIPS
SCALE 1/4" = 1'-0"
PL. Nº 31B.
N. B.
1. ALTERATIONS SHOWN IN RED.
2. TO BE ADDITIONALLY STRENGTHEDIN WAY OF MACHINERY SPACE & AT SIDES OF Nº 3 HATCHWAY.
Thicknesses of doublings abreast No 3 hatch and on Stringer Correct for 483 Ship only. For 481 Ship see Plan 28/7/22
DETAIL AT "A"
(SEE W.S.P & GIRDER & HATCHWAYS)
Nº 3 HATCH
26'-0" × 18'-0"
BOILER OPENING
GALLEY (CEMENTED)
BATH & W.C. (CEMENTED)
GUTTER (CEMENTED)
GIRDER UNDER
STRINGER ANGLE
HATCH END BMS
PORT S. ONLY
APPROVED
DEC 12 1922
KOBE, JAPAN
© 2020
Foundation

APPROVED PLAN "C"

Kawasaki Nos 481 + 483

Alteration to No 3 Hatch

S/S RHINE MARU. No 481

Kobe Rpt no 3920

APPROVED PLAN "B"

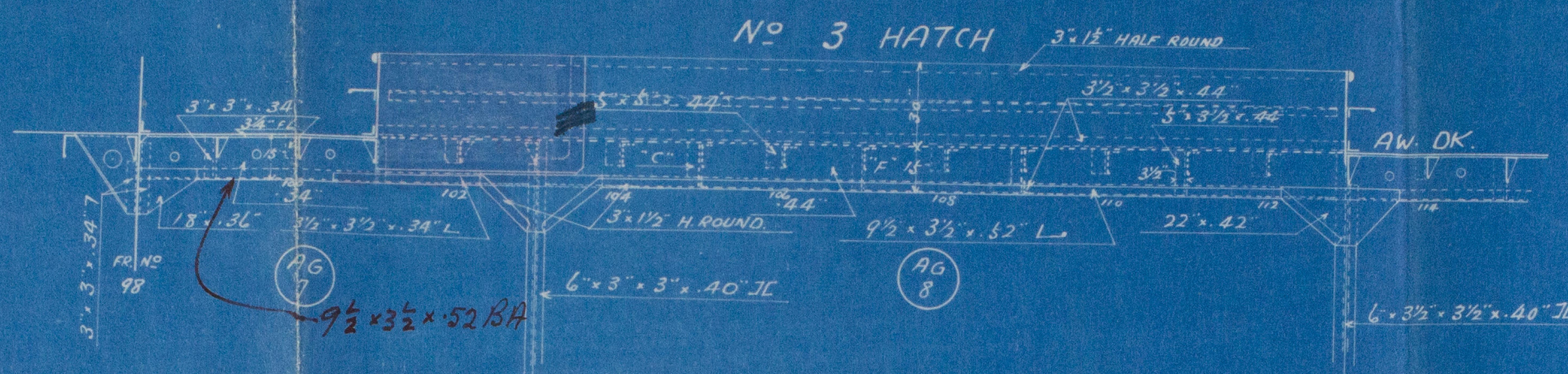
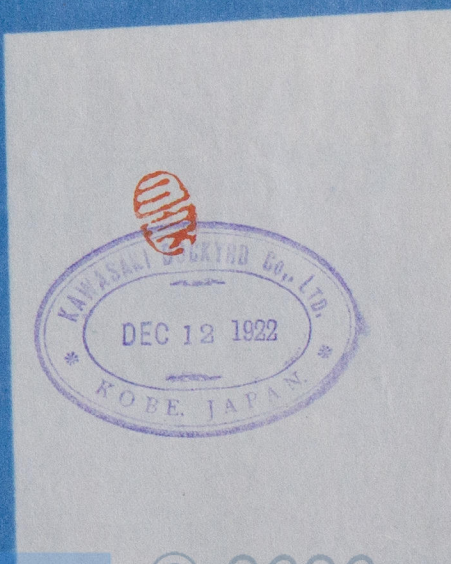
Kawasaki No 481 + 483

Alterations at Aft End
and at No 3 Hatchway

S/S RHINE MARU No 481.
Kobe Rpt No 3920

# No. 481 & 3.

## ADDITIONAL DK. GIRDERS. & PILLARS.

SCALE 1/4" = 1'-0" | PLAN No 41A

APPROVED PLAN "A"

Kawasaki no 481 + 483

Alterations to Aft End Construction

S/s RHINE MARU No 481.

Kobe Rpt no 3920

RETAIN





VED.

OF

Nos 481 & 483
ALTERATION OF
AFT CONSTRUCTION
SCALE 1/4" = 1'-0"
PL. No
N. B.
1. ALTERATIONS SHOWN IN RED.
2. RIVETING TO BE WORKED REFERING TO
PL. Nos 10, 11, 27, 29, 30, 31, 41 & 44
HEEL OF PILLARS
FR. No 6 BHD
(LOOKING FORWARD)
AWNING DECK
STIFFENERS
UPPER DK
W.T. BHD
AFT PEAK TANK
SECOND DECK PLAN
UPPER DECK PLAN
AWNING DECK PLAN
DETAIL OF "AA"
"BB" SECTION
HOSPITAL
No 6 HATCH
APPROVED

NO. 481 SHIP. S.S."RHINE- MARU".

Kobe Rpt no 3920

MIDSHIP SECTION.

Hull Design. Dept. Kawasaki Dockyd & Co.

DATE........................................

# № 481

## MIDSHIP SECTION.

SCALE $\frac{1}{2}$" = 1'-0"

TO CLASS TEISHINSHO RULE 1ST CLASS VESSEL & LLOYD'S 100 A1 WITH FREE BOARD.

### PRINCIPAL DIMENSIONS.

| | |
|---|---|
| LENGTH BETWEEN P. P. | 405'-0" |
| BREADTH MOULDED | 53'-0" |
| DEPTH " TO AW. DECK | 37'-0" |
| HEIGHT BETWEEN UP. & AW. DKS | 8'-0" |
| " " " 2ND " | 9'-6" |
| " " AW. " F'CLE " | 6'-3" |

### SCANTLING NUMBERS.

| | | |
|---|---|---|
| B | 53 | |
| D | 29 | |
| TRANS. № | 82 | |
| L | 405 | |
| LONG. № | 33,210 | |
| L/D TO AW. DK | 10.95 | |
| d " UP. " | 25'-5" | IN MACH. SPACE |
| " " 2ND " | 15'-11" | |

### FORGING & CASTINGS

| | | |
|---|---|---|
| STEM OF ROLLED MILD STEEL | 10½" × 2¾" | |
| STERN FR. { PROP. POST | 10½" × 7½" | } OF CAST STEEL. |
| RUDDER " | 9" × 7½" | |

RUDDER FRAME OF CAST STEEL AS PER DETAIL PLAN.

### EQUIPMENT NUMBER.

| | |
|---|---|
| LONGITUDINAL NUMBER | = 33,210 |
| ERECTIONS (405 × 8 × 0.75) + (31.45 × 6.25 × 0.75) | = 2,577.42 |
| DECK HOUSES (26 + 52) × 7.5 × 0.5 | = 292.50 |
| " " (16.25 × 8.75 + 44.96 × 7.75) × 0.5 | = 245.31 |
| NUMERAL | = 36,325.23 |

### EQUIPMENT.

| | | |
|---|---|---|
| 3 BOWER ANCHORS (STOCKLESS) | 61 C.W.T. | EACH |
| 1 STREAM ANCHOR (COMMON) | 17½ " | EX. STOCK. |
| 1 KEDGE " ( " ) | 7½ " | " " |
| 2 4/16" STUD CHAIN CABLE | 270 | FATHOMS |
| 4¾" STEEL WIRE FOR STREAM ANCHOR | 90 | " |
| 5" " " TOW LINE | 120 | " |
| 2 COILS OF 8" MANILLA | 90 | " EACH |
| 2 " " 7" " | 90 | " " |

### ROWS OF RIVETS IN BUTT

| ITEMS | ½ L ⊗ | ENDS |
|---|---|---|
| AWNING DK. STRINGER PLATE | 3 | 3 |
| " " PLATING | 2 | 1 |
| UPPER " STRINGER PLATE | 3 | 3 |
| " " PLATING | 2 | 1 |
| SECOND " STRINGER PLATE | 3 | 3 |
| " " PLATING EXCEPT TOP OF DEEP TANK WHERE DOUBLE. | 1 | 1 |
| SHEER STRAKE | 4 | 3 |
| STRAKE BELOW SHEER STRAKE | 4 | 3 |
| SIDE PLATING OF SHELL | 3 | 3 |
| BOTTOM " " " | 4 | 3 |
| BOSS " " " | | 4 |
| KEEL PLATE | 4 | 4-3 |
| MIDDLE LINE STRAKE OF INNER BOTTOM PLATING | 3 | 3-2 |
| INNER BOTTOM PLATING | 2 | 1 |
| MARGIN PLATE | 3 | 2 |
| CENTRE GIRDER | 3 | 3 |
| FORECASTLE DK. STRINGER PLATE | | 2 |
| " " PLATING | | 1 |

### RIVETING

| ITEMS | PITCH OF RIV. CR TO CR IN ITS DIA. |
|---|---|
| FRAME TO SHELL | 7. 5½ IN PEAK & DEEP TANKS, & IN DOUBLE BOTTOM BEFORE 3/5 L ⊗ ALSO IN MACH. SPACE |
| FRAME TO FLOORS IN AFT PEAK | 5 |
| " " REV. FR. " " " | 5½ |
| " " " " " MACH. SPACE | 7 |
| BUTTS OF SHELL PLATE | 3½, 4 IN 4 PLE BUTT LAP |
| SEAMS " " " | 5-FOR 1⅛" RIV. 6-FOR 1" RIV. 7-FOR ⅞" RIV. IN NO. BETWEEN FRS. & 4 DIA. CR TO CR AT ENDS |
| DK. PLATE TO BMS. | 7. 6 ON BEAMS TO ALT. FR. & IN DEEP TANK |
| BUTTS OF STRINGER PL. | 3½ |
| " " DK " | 4 |
| EDGES " " " | 4½ |
| GUNWALE ANG. | 4½ |
| DK. STR. " | 7 |
| DOUBLE BOTTOM | |
| BUTTS OF MARGIN PL. & CENTRE GIRDER | 4 |
| BUTTS & EDGES OF INNER BOTTOM PL. | 4 |
| MARGIN ANG. | 4½ |
| KEEL " | 5 |
| FLOOR PL. TO FR. & REV. FR | 7 |
| VERTICAL ANG. ON CR GR AT ENDS | 5 |
| " " " SIDE " | 7 |
| ANG. AT TOP OF CENTRE GIRDER | 7. 5 WHERE CR GR W. T. |
| TOP & BOTTOM ANG. ON SIDE GIRDER | 4 RIV. IN NO. BETWEEN FRS. |
| BUTTS & SEAMS OF BHD PL. | 4½ EXCEPT BOUNDARY BHD OF DEEP TANK WHERE 3½ |
| BULKHEAD BOUNDARY ANGLES | 5, 4½ FOR SINGLE RIV. ANGLES. |
| " STIFFENERS | 7 EXCEPT IN DEEP TANK WHERE 6 |
| SIDE STR. FACE ANGLE | 7 |
| " " SHELL FLANGE OF INTERCOSTAL PL. | 4 RIV. IN NO. BETWEEN FRS. |
| W. S. PILLARS & GIRDERS EXCEPT GIRDER TO DK. | 7 |
| INTERCOSTAL PL. OF DK. GIRDER TO DK. | 5 |
| SHELL PL. TO STEM & STERN FRAME. | 5 |

### W. T. BULKHEADS.

7 IN NUMBER EXTEND TO UPPER DECK EXCEPT COLLISION & AFT END BHD OF DEEP TANK WHICH FORMER EXTEND TO AWN. DK & THE LATER EXTEND TO SECOND DK.

BULKHEAD STIFFENERS AS IN FOLLOWING TABLE:-

| FRAME № | HOLD STIFFENERS | HOLD SPACING | LOWER TWEEN DECK STIFFENERS | LOWER TWEEN DECK SPACING | UPPER TWEEN DECK STIFFENERS | UPPER TWEEN DECK SPACING |
|---|---|---|---|---|---|---|
| FR. № 9 | 7" × 3" × .40" B. ANG. | 24" | 5" × 3" × .32" ANG | 30" | | |
| " " 35 | 9½" × 3½" × .55" B. " | 30" | " " | " | | |
| " " 58 | 9" × 3½" × .525" B. ANG | 24" | | | | |
| " " 74 | " " | " | 5" × 3" × .32" ANG. | 30" | | |
| " " 98 | " " | 30" | " " | " | | |
| " " 149 | 10" × 3 19/32" × 3 19/32" × .575" ] | " | " " | " | | |
| " " 177 | V. STIFF. 10" × 3 19/32" × 3 19/32" × .575" ] H. " 8" × 3½" × .45" ] | 24" 48" UNDER | 5" × 3" × .40" " | 24" | 3½" × 3" × .30" ANG. | 24" |
| LONG. BHD IN DEEP TANK | 8" × 3½" × .40" ] | 26" | | | | |

2ND DK. BEAMS :- 12" × 3½" × 3½" × .60" ] TO ALT. FR.
7" × 3" × .40" ] TO EVE. FR. IN PEAKS
DEEP TANK TOP - 8½" × 3" × .42" .44" ] TO " " WITH 3 ROWS OF GIRDER
HATCH END BEAMS IN DEEP TANK 10" × 3½" × .58" ]

### DOUBLE BOTTOM:-

CENTRE GIRDER 43" × .50" - .40", .60" IN B. SP.
SIDE " .40" - .36" .50" IN B. SP.
TOP 3½" FLANGED TO INNER BOTTOM EXCEPT IN E. SP. UNDER W. S. PILLARS & BEFORE 3/5 L ⊗ WHERE 3½" × 3½" × .40" ANG
№ OF SIDE GIRDER - TWO AT EACH SIDE & ADDITIONAL GIRDER IN E. SP. & BEFORE 3/5 L ⊗
MARGIN PL. .48", .58" IN B. SP. DEPTH ABOVE 33" - 28" AT AFT END, ABOUT 44" IN E. & B. SP.
FL. PL. & T. SIDE BRACKETS .40" - .36", .50" IN B. SP.
INNER BOTTOM PLATING.
M. LINE STRAKE 43" × .50" - .40", .56" IN B. SP.
OTHER " .40" - .36" .48" IN E. SP. .56" IN B. SP.
.48" UNDER HATCHWAY IN DEEP TANK.
FRAMING :- SOLID FL. TO EVE FR. UNDER E. SP., BEFORE 3/5 L ⊗ & № 4 HOLD ALSO UNDER B. BEARERS & W. S. P. & BHDS. TO ALT. FR. ELSEWHERE.
FRAMES 3½" × 3½" × .40" ], DOUBLED BEFORE 3/5 L ⊗
REV. FR. " , .50" IN B. SP., DOUBLED IN E. SP. & UNDER B. BEARER 4½" × 4½" × .60" ]

### FRAMING :-

SPACE 26" & 24" IN PEAKS
HOLD :- 9½" × 3½" × .55" ] EXTEND TO UPP. & 2ND DKS ALTLY, & UPP. & F'CLE DKS ALTLY IN WAY OF F'CLE DK.
LOWER TW. DK. INTERMEDIATE, UPP. TW. DK & ERECTION SIDE INTERMEDIATE FRS. 7" × 3½" × .40" ] WITH PARTIAL BHDS IN UPP. & LOWER TW. DKS AS PER PROFILE.
FORE PEAK :- 7" × 3½" × .44" ] EXTEND TO UPP. & F'CLE DKS ALTERNATELY.
INTERMEDIATE TW. DK. FRS. 6" × 3½" × .38" ]
AFT PEAK :- FR. 6" × 3½" × .38" ] EXTEND TO AWN. DK
REV. FR. 3½" × 3" × .38" ] " " UPP. "
DEPTH OF FR. 6"
WEB FRAMES AT FORE END HOLD
WEB PL. 27" × .48", FACE ANG. 7" × 3½" × .64" ]
SHELL ANG 3½" × 3½" × .48" SINGLE.
W. FR. IN DEEP TANK :- WEB PL. 23" × .44", FACE ANG. 7" × 3½" × .64" ]
SHELL ANG. 3½" × 3½" × .44" SINGLE.
MACH. SPACE :- 10" × 3½" × 3½" × .50" ] WITH REV. 3½" × 3½" × .50" ]
EXCEPT FR. № 88 WHERE 5" × 3½" × .50" ] ALL EXTEND TO UPP. DK.
UPP. TW. DK. FR. 7" × 3½" × .40" ]

BILGE KEEL 6" × 4" × .50" T 9" × .46"

BOTTOM PLATING ('A' - 'E') .64" - .48"
BOSS PLATING .74"
3 - STRAKES ('A' - 'C') TO MAINTAIN MIDSHIP THICKNESS TO COLLISION BHD.

BOTTOM FORWARD STRENGTHENED AS PER RULE.

INTERMEDIATE FRAME

KAWASAKI DOCKYARD Co., LTD.

| Builders No. 4 8 1. |
| --- |
| S.S. " Rhine-Maru " |
| Boiler. |
| Kobe Rpt No 3920. |
| Drawing No. |

To accompany Kobe Rpt no 6148
S/S BORDEAUX MARU

KAWASAKI DOCKYARD Co., LTD.

| Builders No. 1878. |
| --- |
| S. S. Turbine Steamer "Rhine" & "Bordeaux". |
| Contrapropeller |
| Guide Rudder and Aft. Blades. |
| Drawing No. 1 |

ロイドレジスター

006479-006488-0027

To accompany Kobe Rpt no 6148
S/S Bordeaux maru

KAWASAKI DOCKYARD Co., LTD.

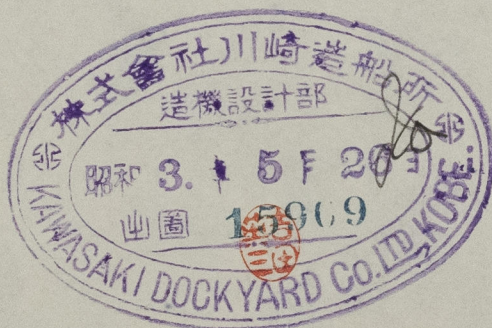
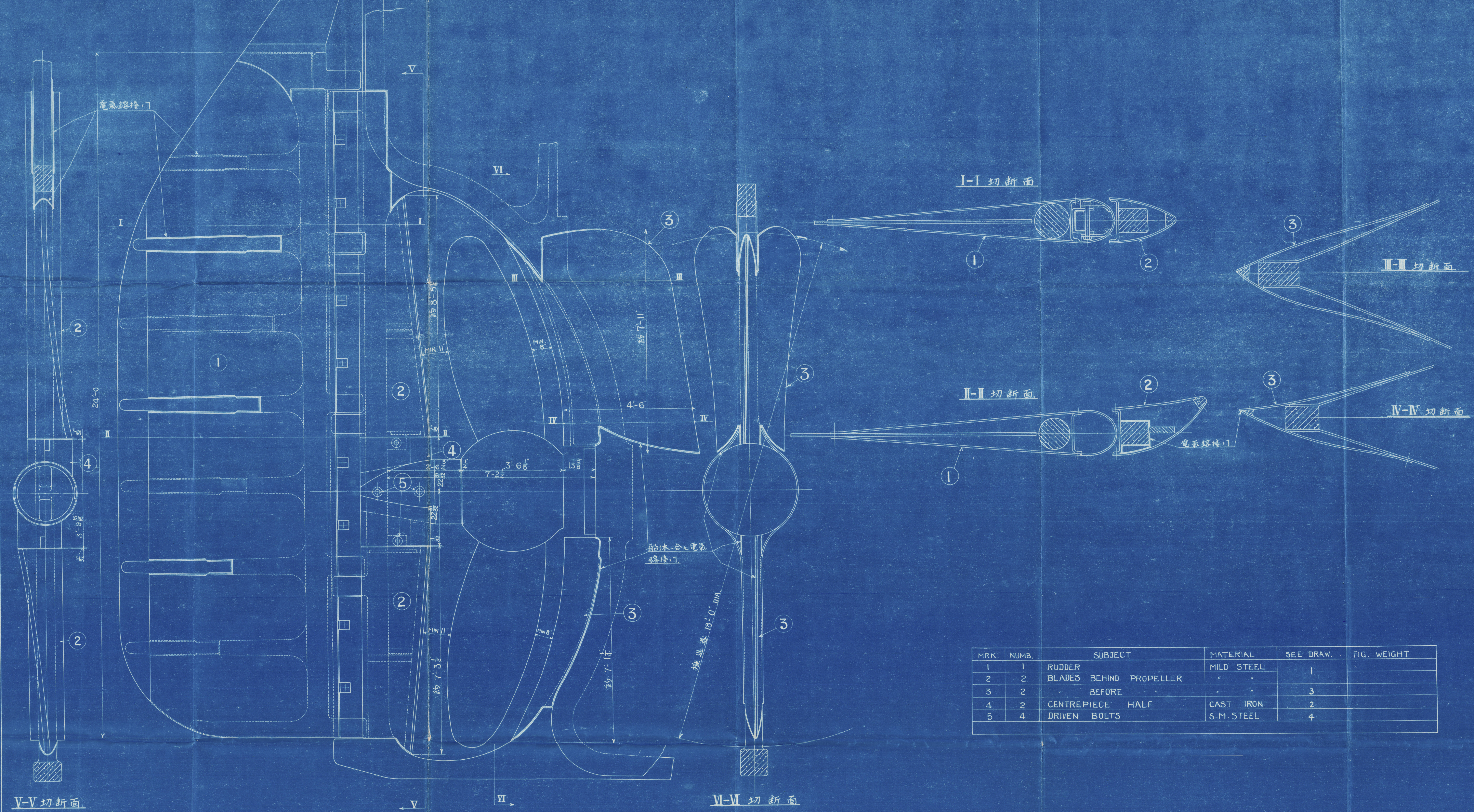
| | |
|---|---|
| Builders No. | 1878. |
| S. S. Turbine Steamer "Rhine" & "Bordeaux". | |
| Contrapropeller | |
| For'd Blades. | |
| Drawing No. 3 | |

ロイド送

| 符号 | 名稱 | 試驗片 | 採取記号 | 鋳造記号 | 規格條項 | 材質 | 製造個数 壹組分 | 豫備 | 壹隻分 | 壹組分重量 豫定 | 實際 | 水圧試驗力 | 材料指定番號 | 備考 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 上部翼 | | | | | 鋼板 | 2 | | 2 | | | | | 厚サ 7/8" |
| 2 | 下部翼 | | | | | 仝上 | 2 | | 2 | | | | | 仝上 |
| 3 | 塞板 | | | | | 仝上 | 2 | | 2 | | | | | 仝上 |
| 4 | 翼端金物 | | | | | 鋳鋼 | 1 | | 1 | | | | | |
| 5 | 鋲 | | | | | 鋼鋲 | | | | | | | | 7/8" DIA. 鋲 |
| 6 | 仝上 | | | | | 仝上 | | | | | | | | 3/4" DIA. 鋲 |

To accompany Kobe Rpt No 6148
S/S Bordeaux Maru

KAWASAKI DOCKYARD Co., LTD.

| Builders No. 1878. |
| --- |
| S. S. Turbine Steamer "Rhine" & "Bordeaux". |
| General Arrangement of |
| Contrapropeller. |
| Drawing No. 7 |

ロイド送り

| MRK. | NUMB. | SUBJECT | MATERIAL | SEE DRAW. | FIG. WEIGHT |
|---|---|---|---|---|---|
| 1 | 1 | RUDDER | MILD STEEL | 1 | |
| 2 | 2 | BLADES BEHIND PROPELLER | 〃 〃 | | |
| 3 | 2 | 〃 BEFORE 〃 | 〃 〃 | 3 | |
| 4 | 2 | CENTREPIECE HALF | CAST IRON | 2 | |
| 5 | 4 | DRIVEN BOLTS | S.M. STEEL | 4 | |

To accompany. Kobe Report No 6148
S/S. BORDEAUX MARU

KAWASAKI DOCKYARD Co., LTD.

| Builders No. 1878. |
|---|
| S. S. Turbine Steamer "Rhine" & "Bordeaux". |
| Contrapropeller |
| Center-pieces. |
| Drawing No. 2 |

ロイド送リ

006479-006488-0030

注意

1. 総テノ面ハ出来ル丈ケ滑カニ鋳造ノ丁.
2. 螺釘孔ハ総テ型取リノ上穿孔シ左右半分ハ何レニモ取リ換ヘラルル様ニ施工ノ丁.
3. 鋳物鋳造及仕上ゲ以外ハ総テ修繕部ニテ施工ノ丁.

| 符號 | 名稱 | 試驗片 採取記号 | 徑 D | 長 L | 植込捨 M | 壱吋ニ付螺山数 | 材質 螺釘 | 材質 母螺 | 製造個数 壱組分 | 製造個数 豫備 | 製造個数 壱隻分 | 壱組分重量 豫定 | 壱組分重量 實際 | 材料指定番號 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | ガードリング取付押螺 | | ¾" | | | 10 | ネーバル真鍮 | | 18 | | 18 | | | |

| 予定総重量 | 壱組分 | 瓩 | 壱隻分 | 瓩 |
|---|---|---|---|---|

| 符号 | 名稱 | 試驗片 採取記号 | 鋳造規格 記号條項 | 材質 | 製造個数 壱組分 | 製造個数 予備 | 製造個数 壱隻分 | 壱組分重量瓩 予定 | 壱組分重量瓩 実際 | 水圧試験力 瓩/糎² | 材料指定番号 | 備考 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | センターピース | | | 鋳鉄 | 2 | | 2 | | | | | |
| 2 | ガードリング | | | 鋼板 | 2 | | 2 | | | | | |
| 3 | 接目板 | | | 仝上 | 2 | | 2 | | | | | |
| 4 | 鋲 | | | 鋼鋲 | 6 | | 6 | | | | | |
| 5 | 補強板 | | | 鋼板 | 2 | | 2 | | | | | |
| 6 | 挿金 | | | 仝上 | 2 | | 2 | | | | | |

製造個数ハ壱隻分ヲ示ス. 貳隻分製造ノ丁.

| 鍛工 | 罐工 | 模 | 鑄 | 旋 | 定 | 組 |
|---|---|---|---|---|---|---|
| 1 | | 1 | 1 | 1 | 1 | 1 |
| 二旋 | 鍊 | 鑵 | 銅 | 道 | 外業 | 修繕 |
| | | | | | | 2 |
| 電設 | 船設 | 兵庫 | 臺台 | | 艦本 | 監督 |